

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US/19385

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 F21L4/02 F21V5/04 F21Y101/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F21L F21V F21Y F21K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | GB 2 329 011 A (HOWELLS RAILWAY PRODUCTS LIMIT) 10 March 1999 (1999-03-10)<br>abstract<br>page 10, line 24 -page 11, line 7<br>figure 2                              | 1-16                  |
| X          | DE 201 15 797 U (MERLAKU KASTRIOT) 7 March 2002 (2002-03-07)<br>page 2, paragraph 4 -page 3, paragraph 1<br>figure 3   | 1, 10                 |
| X          | WO 00 55685 A (BAUER FREDERICK T ;BONARDI TIMOTHY A (US); TURNBULL ROBERT R (US);) 21 September 2000 (2000-09-21)<br>page 48, line 21 -page 48, line 27<br>figure 35 | 1, 10                 |

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

8 October 2003

Date of mailing of the international search report

21/10/2003

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/0385

| Patent document<br>cited in search report |   | Publication<br>date |    | Patent family<br>member(s) |  | Publication<br>date |
|---|---|---------------------|----|----------------------------|--|---------------------|
| GB 2329011                                | A | 10-03-1999          | AT | 236821 T                   |  | 15-04-2003          |
|   |   |                     | AU | 8876998 A                  |  | 22-03-1999          |
|   |   |                     | DE | 69813255 D1                |  | 15-05-2003          |
|   |   |                     | EP | 1012023 A1                 |  | 28-06-2000          |
|   |   |                     | WO | 9911498 A1                 |  | 11-03-1999          |
| <hr/>                                     |   |                     |    |                            |  |                     |
| DE 20115797                               | U | 07-03-2002          | DE | 20115797 U1                |  | 07-03-2002          |
| <hr/>                                     |   |                     |    |                            |  |                     |
| WO 0055685                                | A | 21-09-2000          | US | 6441943 B1                 |  | 27-08-2002          |
|   |   |                     | AU | 3527900 A                  |  | 04-10-2000          |
|   |   |                     | CA | 2367011 A1                 |  | 21-09-2000          |
|   |   |                     | EP | 1169668 A1                 |  | 09-01-2002          |
|   |   |                     | JP | 2002539026 T               |  | 19-11-2002          |
|   |   |                     | WO | 0055685 A1                 |  | 21-09-2000          |
|   |   |                     | US | 2002154379 A1              |  | 24-10-2002          |
|   |   |                     | US | 2003002179 A1              |  | 02-01-2003          |
|   |   |                     | US | 2002024713 A1              |  | 28-02-2002          |
| <hr/>                                     |   |                     |    |                            |  |                     |